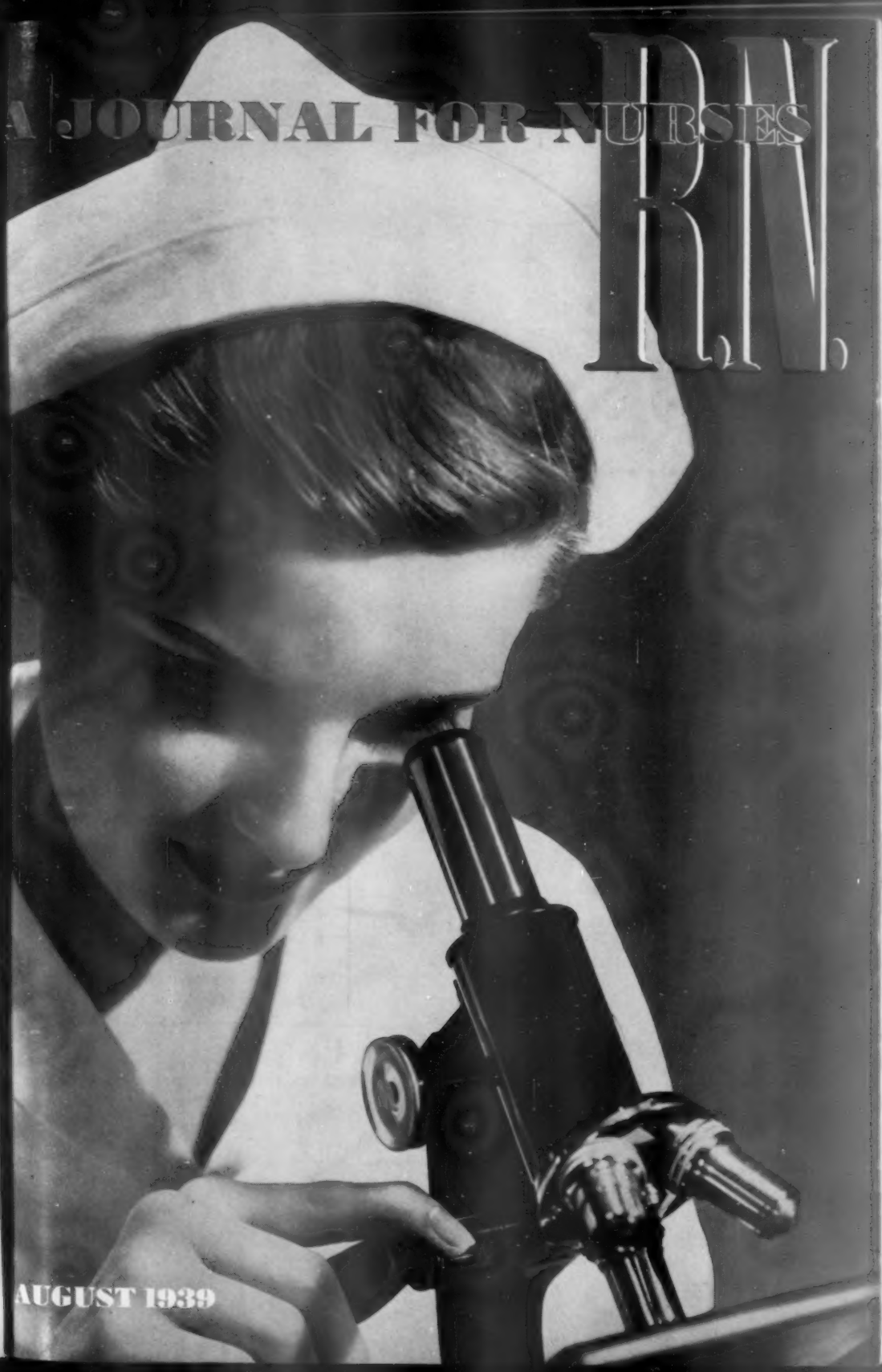
A JOURNAL FOR NURSES

R.N.



AUGUST 1939

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Chux

DISPOSABLE DIAPERS

IN *This* ISSUE

August 1939 Vol. 2, No. 11

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A JOURNAL R.N. FOR NURSES

Circulation: 101,600 registered nurses. Copyright, 1939, Nightingale Press, Inc. Editorial and business offices at Rutherford, N. J. Dorothy Sutherland, managing editor. Advertising representatives: Cyrus Cooper, Eastern manager, and Gladys Huss, Eastern associate, Graybar Bldg., New York City; J. M. Keene, Western manager, 870 Peoples Gas Building, Chicago; Weston Oyler, New England manager, 1105 Commonwealth Ave., Boston.

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"In the first place—Modess is a 'fluff-type' napkin—not built of closely packed layers, like 'layer-type' napkins. Just feel that soft, fluffy Modess filler! It's made of pure cellulose, *fluffed* by a special process, so that every fiber is *cushioned in air*. This gives Modess its wonderful springy softness . . . makes it conform more comfortably to the shape of the body.

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If you are planning to visit the New York World's Fair—See the

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in the Hall of Pharmacy. Helpful material available without charge...

Debits and credits

CHEAP MOVIES

Dear Editor:

Isn't there something that we, as registered nurses, can do to check the flood of cheap moving pictures which so vilify the true character of nurses?

As long as such pictures as "Four Girls in White" are presented to the public, people will believe that nurses in life are like those on the screen. While such a belief exists, we are going to lose our fight for recognition as a *professional* group.

Emphatic protest to Hollywood might help, if it came from organized nursing groups. It is time the profession took a definite stand.

Viola Weslock, R.N.
Brooklyn, N.Y.

[*Do readers want* RN—A JOURNAL FOR NURSES *to take action in this matter? Let us hear from you.*—THE EDITORS]

SPOILING THE BROTH?

Dear Editor:

In answer to R.N., Vernon, Calif. (May issue), I do not see how the "nurse-maid" she mentions ever became a registered nurse.

When I was in training—and it is still the case—students had to spend a specific number of hours on dietetics and practical cooking. Every registered nurse should be able to take care of her patient's meals when it is necessary. If she either can't or won't do this, it is no wonder that practical nurses are stealing the show.

Henrietta F. Marston, R.N.
Pomona, Calif.

COLLECTION TIPS

Dear Editor:

In response to the letter on "Fees" which appeared in your May issue, perhaps the action of the private duty nurses of District No. 2 of the New York State Nurses' Association may be helpful.

I quote the paragraph which has just been inserted by the private duty nurses in the rules which govern the registry and the registrants:

"*Delinquent Patients.* Nurses shall have the power to report to the registrar, as delinquent, any patient who has made no attempt, after thirty days, to pay the nurse's bill. Such patients shall not be provided with further private duty nursing care until settlement has been made in full. Names will be removed from this list on payment of the bill, and must be reported by the nurse, to the registry, immediately."

Adele R. De Aoun, R.N.
The Genesee Valley Nurses Ass'n
Rochester, N.Y.

Dear Editor:

Methods of making collections satisfactorily must be adapted to the situation. I have found several ways of collecting fees without difficulty.

My alumnae registry calls a nurse on a case only when the fee for the first day has been deposited. If the nurse goes on duty for the second and succeeding days without checking with the registry concerning further arrangements for payment, the loss is her own.

In one case not furnished by the registry, no mention of salary was made after two weeks on the case. I consulted with the superintendent of the hospital, and she arranged to have my fee added to the hospital bill. There was no difficulty in collecting, and I was paid weekly.

Often in home cases I have obtained the doctor's cooperation. He arranged the amount and date of payment with the patient or family, so that there was a definite understanding.

If nurses would follow a more business-like procedure, they would have less difficulty in making collections. The following rules may offer a suggestion:

1. Use professional billheads.
2. Have a verbal agreement when starting the case as to the member of the family who is responsible for payment, what the salary is, and that payment is to be made weekly.
3. Present a bill on the last day of each week.

NEWS ABOUT ATHLETE'S FOOT

After five years of chemical, bacteriological and clinical research, Mennen now presents QUINSANA Powder—a New treatment for Athlete's Foot. Prevention and cure are based on changes in the pH of the skin necessary for fungus growth.

The use of QUINSANA in this new treatment of Athlete's Foot has PROVED uniquely effective. Used by dermatologists on hundreds of cases, Quinsana has established an amazing record of success.

1st — Helps Clear Up The Infection

Quinsana has a three-fold action: (a) It is a potent fungicide; (b) It helps dry up the moisture which enables the disease to thrive; (c) *It utilizes a principle heretofore ignored, namely that the fungus causing Athlete's Foot is killed by an alkaline medium of a hydrogen-ion concentration correct for this purpose.*

2nd — Helps Prevent Re-Infection

The biggest difficulty in the treatment of Athlete's Foot has been to keep the disease from RECURRING. Recurrence is usually due to re-infection—frequently from the inside of the shoes, where the fungus causing Athlete's Foot can readily flourish. Ointments and liquids cannot be used on the inside of the shoes. But Quinsana CAN, because it is a powder. Quinsana not only helps clear up Athlete's Foot, but is a powerful aid in *preventing* RE-INFECTION.

FIGHT ATHLETE'S FOOT

The public need for a drive against Athlete's Foot is great. The disease is widespread. The Mennen medical director and research dermatologist and his aids have just completed a survey among all the available groups in a city of 60,000 population. *Here are the startling results.* 1270 men and women were examined and 74% HAD ATHLETE'S FOOT. 88% to 100% eradication in various groups was accomplished with Quinsana in a short time.

We invite you to join this drive to stamp out Athlete's Foot. We'll gladly supply you with detailed literature and full-sized tin of Quinsana Powder. *Use the coupon.*

FREE: 35¢ SIZE QUINSANA

To THE MENNEN CO., Dept RN-8 345 Central Ave., Newark, N. J.
Send me FREE a full 35¢-size tin of Quinsana Powder, together with detailed literature for the treatment of Athlete's Foot.

Name_____

Address_____

City_____ Hospital_____

4. Leave the case at the end of the second week if no salary is forthcoming.

Maybelle Lord, R.N.
Fort Myers, Fla.

Dear Editor:

I offer the following suggestion in connection with collection of fees, as mentioned in Juliette Golden's letter:

Hospitals and the majority of doctors and dentists ascertain the patient's credit standing and paying habits from their local credit associations. Nurses doing private duty might profitably follow this method. It is business-like and can be done without embarrassment or loss of dignity.

If official registries would obtain membership in such associations, they could furnish the nurse with the necessary information about the patient's financial standing when she was called on a case. Where it was found that the patient was unreliable about paying his bills, an arrangement might be made for payment in advance.

Florence M. Fitzsimmons, R.N.
San Diego, Calif.

[*Awards of $5 were offered in the May issue for the best collection ideas sent in by readers. From the many letters submitted, the foregoing three have been chosen as the most helpful. Miss Lord and Miss Fitzsimmons each receive the award offered. To Miss De Aoun, who said she wished no fee for her idea, go* R.N.'s *thanks plus $5 to apply to her local sick-nurses' fund.*—THE EDITORS]

PROFIT

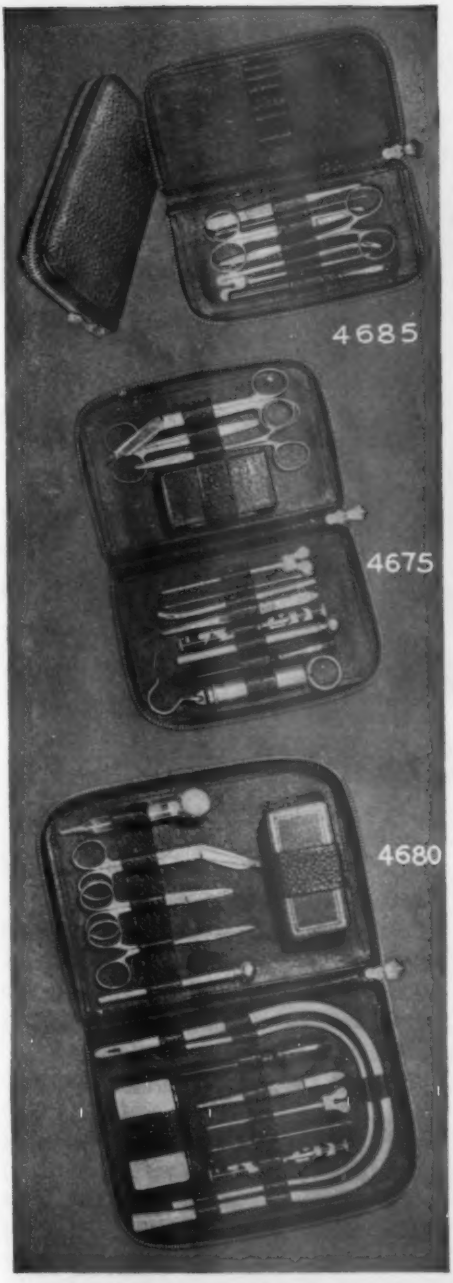
Dear Editor:

I hope my experience may carry a message to other nurses.

During the past year and a half, I was forced to rest because of a small lung shadow that threatened to increase. I carried out orders to the letter, and am now well and able to resume professional activity. If everyone would recognize the importance of early-stage discovery and of a real "rest cure," how quickly the incidence of T. B. among nurses would drop!

I hope soon to return to work with my time budgeted sanely between duty and recreation. I've learned the lesson of "all work and no play..."

R.N., Port Royal, Pa.



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●

"How to Obtain Maximum Service from Hypodermic Syringes, Needles, etc." is the name of a 28-page booklet designed for nurses and recently published. If you have not yet secured a copy, send for one today.

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Djukas, jungles, and Medicine

"Wan sani hoso?" The strange Djuka greeting of "Anybody home?" is rigid etiquette to these savages. Even stranger was finding a modern hospital in the jungle wilderness.

By MILDRED MARTIN

• A small Javanese nurse in trim blue uniform and starched white cap greeted me at the entrance to the jungle hospital. She was to escort me on a tour of inspection.

It was a sticky, hot day in early February. But in the South American jungle, five degrees above the equator, the weather can only be hot or hotter —no matter what the season. The nurse accepted this fact with true oriental fortitude—just as she accepted the uncomfortable long sleeves and stiff white collar and cuffs of her uniform.

Her crisp efficiency and the modern, well-equipped hospital might well have been witnessed in any one of a dozen small American towns, instead of Moengo, deep in the heart of Surinam [Dutch Guiana]. It seemed incredible that I should find such evidence of civilization after my slow trip on an ore boat a hundred miles into the jungles lining the Cottica River.

I arrived at the Moengo hospital just as the polyclinic service closed for the day. My escort led me to the wards. In the women's division a Javanese mother and her doll-like baby, and a Negro woman recovering from an appendectomy, smiled as we passed. They are part of the strange combination of races living in and around the bauxite mining town maintained by the Dutch subsidiary of the Aluminum Company of America.

The company built the fifty-bed hospital to care for its Dutch and American employees and their families. However, as the need for medical care increased, hospital service was made available to natives and non-workers as well. These include Chinese and Javanese originally brought to Surinam for work on sugar plantations, Negroes, and mixtures of the three races.

Occasionally, Moengo nurses have as ward patients the French *libérés* escaped from the comparatively near penal colony, St. Laurent.

By far the strangest of the hospital's patients, however, are the Djukas. Pure African, and once enslaved, they continue to live the primitive life of their ancestors. Songs and legends reiterate their bitter experiences as slaves of the white man. Intermarriage is for-

Gendreau

bidden. Tales of the white man's medicine magic, however, have slowly permeated the Djuka encampments near Moengo. Now many a Djuka has overcome his fear enough to come to the hospital for treatment.

What is true of the Djukas around Moengo is not true in the encampments farther away, for there the native medicine man still holds sway and the potions he brews are held in higher esteem than the scientific medicines at the Moengo hospital. The native midwife, too, is a power in Djuka communities and among the Surinam negroes as well.

In the men's ward, we stopped at the bed of a Djuka boy, suffering from yaws. This and leishmaniasis are the diseases which most often afflict these primitives. Caring for this boy, the nurse told me, was a simple matter. He accepted treatment willingly and never complained. A Djuka is trained from early childhood to be staunch in the face of pain.

My escort was a surgical nurse, but special nurses in the Moengo hospital do general duty as well. There is no problem of overcrowding in the nursing field. Indeed, there is an urgent need for nurses throughout Surinam. Salaries, however, are low—about $33.60 a month. Requirements are low, too. A young woman may begin her training with only a common school educa-

Photos from Gendreau

Good little Injun! Cod-liver oil apparently tastes the same in any language.

tion. Then, after two years in a hospital, she is permitted to go out and practice. Even at the hospital at Paramaribo, which has a training school, the requirements for entrance are lax compared to our standards.

Although all the nurses employed in Moengo must be Dutch citizens, the five young women on duty when I was there were all of different races. One was a Surinam Negress; one was a Chinese-Javanese; my guide was Javanese; and the other two were the unidentified racial mixtures so common in the South American tropics. The superintendent, however, is a white woman from the Netherlands.

Linguistic ability is a "must" in the hospital. All the nurses speak Dutch, of course, as well as the native dialect. Surinam nurses also know some "talkie-talkie," the hodge-podge of languages the Djukas employ. Some nurses know a little French. One has also studied English at Paramaribo, and fortunately knows a few words each in the tongues of her Chinese mother and Javanese father.

All this is particularly necessary in the clinic. The physician in charge is always pressed for time and the nurses must help in many ways. Fifty to sixty patients are treated daily: Djukas, town Negroes, Javanese, Chinese, and white men—all speaking different languages. While the nurses help with dressings, bone-settings, dispensing medicines, keeping records, and other work, they must also give advice to mothers-to-be, interpret, suggest, calm, and persuade. All in all, it's quite a job for $33.60 a month.

After a day in the hospital, and the strain of the clinic, there is not much energy left for organizing extra nursing or other health services beyond the hospital walls. Nor are there other nurses in the interior with whom to join. So the Aluminum Company nurses at Moengo stand quite alone.

As for health problems in the jungle, Surinam Negroes, Javanese, and Djukas are all tropical peoples and are much more resistant to tropical disease than white men. Nevertheless, malaria does bring down a good many of the natives. Thus, the hospital load is extremely heavy in October and Novem-

ber—the fever season. Yaws and leishmaniasis seem to be accepted with a shrug, yet both might be controlled under more sanitary living conditions. Moengo itself is kept reasonably clean, but no attempt is made to regulate the conduct of individual natives or to change their age-long habits.

In the hospital, everything possible has been done to modernize equipment and service.

A large, well-lighted operating room contains equipment brought from Germany. Its chromium and white enamel fixtures, the operating table, therapeutic lamps, and electric sterilizers glisten and are reflected in the spotlessly clean terraza floor. Glass cabinets hold a fine array of instruments. An adjoining cubicle houses X-ray equipment and a darkroom for developing. Along another corridor are several bathrooms for hydrotherapy.

Although Moengo has a large power plant, the hospital has its own private dynamo. This supplies the electricity to run the sterilizers, ice-machine, and washers and manglers in the basement laundry. It also supplies power for the great pressure cookers in the kitchen for the rice and millets that are staples in the diet of the Negro and oriental patients.

Only one thing is lacking. There is no delivery room. Sometimes the babies are delivered in bed; difficult cases in the operating room. Nurses and staff, however, do not believe a special room is necessary because few natives come to the hospital for obstetrical care.

Living conditions in the jungle are rather difficult. Intense heat, rains, monotony, tell on the white man's spirit. That, perhaps, is one reason why Moengo still lacks a public health nurse and a sanitary inspector for nearby Djuka villages. Another reason may be the policy—proven by experience—that the best colonizers interfere as little as possible with native ways. Part of the hospital's success, therefore, may be due to the fact that it has shrewdly allowed many old traditions to continue and has not *forced* the natives to accept all modern conveniences.

All set for a seance with a fever demon. This Djuka medicine man looks pretty nifty in his professional attire.

Two degrees in search of a job

By ROXANN

● "Isn't *this* a nifty looking get-up? Almost as bad as the one we wore in first-year training!" Amy, who has shared my apartment for several months, turned up her nose at the voluminous black academic gown and the square, tasseled hat. In another two hours—and after years of hard study—she could add the letters M.S. to the R.N. and the B.S. in Nursing Education she already possessed.

"The sweet girl graduate, after ten years of nursing experience and spare-time book larnin' . . ." Amy went on. "Well, I've had a good time and met *such* interesting people, even if there have been some tough spots along the way. But with this background it should be easy to find a good job—say about $3,000 a year to start. I'd settle, of course, for $2,000 in Hawaii or Switzerland or Ecuador. A girl's entitled to a pretty nice post in exchange for $4,500 worth of degrees—not to mention the job I gave up as supervisor, the clothes I've done without, the shows I haven't seen, the books I haven't bought, the dinners I haven't eaten . . ."

"Also the commencement you won't attend, if you don't start immediately," I interrupted. "I'll help you begin job-hunting tomorrow."

Amy made the rounds of the professional registries the next day. And came home loaded to the gunwales with blanks to be filled out in sextuplicate! She borrowed my rickety typewriter to write a plaintive appeal to the clerk of the little town where she was born. Census records of thirty-odd years being what they are, there seemed to be some doubt in the matter. But the clerk finally admitted that Amy had been born . . . and sent along the desired proof.

Then there were Amy's former employers, who eventually conceded that her work had been "satisfactory." Satisfactory? Why Amy is one of the best nurses I know!

After a few weeks of similar correspondence, Amy exploded. "A little more of this, and I'll begin to consider myself lucky not to be in Alcatraz! About all anyone will admit is that I haven't committed a crime or violated a moral law. Up till now I was pretty proud of my nursing record."

Over the breakfast table every morning Amy and I would read about Mr. Wagner and the National Health Program and how the demand for public health nurses was increasing by the minute. Or we'd pick up a nursing bulletin and see some notes about staff nurses

who were being sent to universities on scholarship funds, whereupon Amy would get out her bank book and look at it grimly.

After several weeks, little thin-paper returns began to drift in from the agencies. The first one inquired whether Amy would like to apply for a position as public health nurse in a county in Tennessee. The job offered a fine opportunity to serve humanity. The nurse would be expected to organize groups and work with families. She could teach sewing, gardening, canning, nutrition, pre-natal care and health in general, and could give nursing care in the homes as needed. She could coordinate the health work in the county, set up a plan for case-finding in tuberculosis, teach health in the schools, etc., etc.

"All for $1,200 a year," Amy gasped. "I guess there just isn't enough Florence Nightingale in me." She crept to the typewriter and wrote a polite but firm refusal.

The next one was nearer home—staff nurse in a large urban public health organization.

Amy reported the interview that night at dinner:

"I said to them, 'Why staff nurse? I've had six years of supervising and teaching.'

" 'Not in a generalized service,' they said, looking down their noses.

" 'But aren't the principles the same anywhere?' I asked. I went into my ritual, telling the various types of experience I'd had and the theories I'd studied, and wound up by reminding them that after all I *did* have a Master's degree in Science.

"The answer was that education wasn't everything!

"All I could think of was the time I applied for a position in a hospital, only to be told that it didn't matter what I *knew*. If I didn't have a degree they could not hire me. It just doesn't add up! The hiring-and-firing squad should get together on their signals, it seems to me." [*Continued on page* 28]

"She borrowed my rickety typewriter to fill out blanks in sextuplicate."

BY DOROTHY SUTHERLAND

There's plenty of excitement in 13,000 miles of nursing a month. Here are several stimulating episodes from the experience of rail-riding nurse-stewardesses.

Rail roads to adventure

• Speeding along at eighty miles an hour, the streamlined "Blue Streak" was forty minutes from its next stop.

In one of the day coaches, a fat man lumbered down the aisle to the water-cooler and drank several paper cupfuls as if his thirst were endless. His hand shook as he drank. Little drops of water trickled down over his chin onto his tie and waistcoat. Then he dragged himself back to his chair and sank into it heavily.

Soon, he began to struggle for breath. He tried to cry for help. But the exertion was too much for him.

At that moment, a passenger across the car noticed him.

"That man's ill," he exclaimed. "Call the stewardess!"

Answering the call, the nurse grabbed her ammonia bottle and bag and hurried forward from her section in the Pullman.

One look at the patient told her he *was* ill—very ill, indeed. "Heart," she said to herself as she took his pulse and prepared to administer a hypo.

Passengers clustered around in a nervous group. "Will one of you go for the conductor and someone else get some pillows from one of the Pullmans?" the nurse asked. "Everyone else please return to his own seat or go to the end of the car so that this man can have plenty of air and quiet." Her voice was calm but insistent.

Loosening the patient's collar, the nurse made him comfortable. Soon his stertorous breathing ceased. He appeared to be relaxed and resting.

The trained eye of the stewardess, however, saw cause for alarm in this apparent improvement. She again took his pulse, felt it flutter momentarily and then stop altogether. It was too late; no further medication could help.

"We must have a doctor at the next station," she told the conductor quietly.

Ten minutes later, the Blue Streak slid to a stop at its scheduled station. Waiting at the tracks were a doctor, an ambulance, and two men with a stretcher.

The doctor boarded the train, heard the nurse's report, and went about examining the patient. The nurse then turned her attention to the other passengers.

Steady there! Making small travelers comfortable—and thinking up games—often keeps Mildred Traband of the B. & O. stepping.

"He's had a bad heart attack," she explained. "But he'll be well cared for. We're taking him off the train here. His family will be notified by wire at once."

When the Blue Streak got under way again the stewardess returned to her section and made out a detailed report. At its conclusion she wrote, "None of the passengers realized that the patient died twenty minutes before we reached the station."

Death during transit is a rare incident. But when it does occur, the 200-odd stewardess-nurses employed on American railways are equipped to cope with it. All graduate registered nurses, these young women are ready to meet the most severe—or the smallest—emergency which may arise during cross-country rail travel. Brisk and professional, they are reluctant to talk of their work as being any different from other kinds of nursing posts. Yet they all admit that railroading does offer a variety of excitement and adventure not found in home or in hospital.

On runs between New York and Chicago, and between Chicago and the Pacific Coast, stewardess-nurses average 13,000 miles per month with one- or two-day layovers between trips. In the Eastern territory, riding the nation's oldest railroad—the Baltimore & Ohio —they cover ground made memorable by the Revolutionary and Civil Wars. Out West, on the Chicago, Rock Island & Pacific, Union Pacific, and subsidiary routes, they speed through a land rich in pioneer history and education. In the Southwest there is the desert with its Indian lore and exotic blooms. To the North, there are cowboys, cattle, ranches, and range after range of towering mountain peaks.

Probably no group of nurses have as much first-hand knowledge of American

Chicago, Rock Island, and Pacific R. R.

Pullman or daycoach, the nursing service is the same. Headaches, heart attacks, and plain loneliness are all in the day's work.

history as have these stewardesses. The railroads have helped them in this respect by providing descriptive guides to landmarks throughout the continent. Passengers are always curious about the route they are traveling, and it's part of the stewardess' job to answer their questions.

Stewardesses on the Overland Route between Chicago and San Francisco found their historical data particularly helpful last winter. Snowbound for twenty-four hours in Western Kansas, they were at their wits' end to supply amusement for the several children aboard during the long wait.

During daylight hours they organized snow sports and snow-man building with great success. But by nightfall the children grew restless. Parents feared their offspring would become frightened by the silence and great darkness of the night. So the stewardess organized a story-telling party in one of the Pullmans. There they held the children's interest till bedtime with tales of early railroad days and of the progress from yesterday's Iron Horse to today's streamlined giants.

Snow, however, is not the only element which adds excitement and suspense to the job of railroad nursing. Floods in the Spring and cloudbursts in the Summer may cause washouts, holding up rail travel sometimes for hours. Often trains are detoured slowly over subsidiary tracks and onto temporary spurs until raging flood waters have begun to subside. Here again, it is the job of the stewardess to keep the passengers comfortable and contented.

Norma Thompson, stewardess on the B & O's Shenandoah run between Chicago and New York, finds there is a perceptible change in most railway passengers at nightfall. All the basic traits, carefully disguised during daylight hours, seem thrown into sharp focus. For example, the bored-looking salesman who slumps in his chair before sundown, brightens like a night-bloom-

[*Continued on page* 30]

Anesthesia —a career

A recent survey of nursing careers shows anesthesia among the top five. Here are some facts about its development and its possibilities.

BY LILA LEE NORTON, R.N.

• "You may begin now, Doctor, the patient is ready."

The surgeon nods and deftly draws the scalpel across the small expanse of exposed abdomen. The intern across the table with sponge and hemostat in hand quickly follows the trail of crimson left by the knife blade.

Another operation has begun.

Granted the power of omnipresence, one might see such a scene re-enacted thousands of times every day in hospitals all over the land.

In nearly every case the dominant figure in the tableau is not the surgeon, prominent though he may be. It is the figure seated at the head of the operating table, amid a myriad of tanks, dials, and gadgets, who gives the word for the surgeon to start. To her care the safety of the patient is largely entrusted.

She is the anesthetist.

In all likelihood she is a *nurse* anesthetist. An R.N. especially trained in this field.

Nearly fifty years ago, Alice MaGaw, newly graduated from the Woman's Hospital School of Nursing in Chicago, went to St. Mary's Hospital in Rochester, Minnesota. After a thorough course of training there, she began to give anesthetics for the Doctors Mayo. In December 1906, she published a paper summarizing the 14,380 times she had administered anesthesia—without a single fatality. And in that year was born a new career for nurses.

Miss MaGaw is the first recorded nurse anesthetist. Today all but a small percentage of anesthetics are administered by nurses who have supplemented their nursing courses with postgraduate study.

Their record is clean and impressive. Complications and deaths from anesthesia in this country are at an enviable low. The position of the nurse anesthetist on the American scene has, therefore, been proved sound, both sci-

[*Continued on page* 34]

The third eye

• Our progress on this planet is governed largely by what people think of us. And what they think of us is but a distillate of their impressions.

Why, for example, does the head nurse consider Mary Jones "capable"? Because of an impression she has picked up. She remembers how deftly the nurse catheterized that Mrs. Duff who had a spinal injury and was in a plaster-cast.

Why is Alice Smith "accurate" and "thorough"? Because someone received that impression after looking at one of her clinical charts on which the patient's condition was carefully classified, its characteristics were fully described, and each of the important factors that should have been charted *was* charted.

Actually, the elements by which we are judged are few. They may be grouped under a very few headings. Clinical charting is one of them.

A chart is a definite physical entity. It may be seen and held and read. It has a certain permanence, too. That's why it's so likely to be taken as tangible evidence of our competence, or lack of it.

As Mrs. Hopkins says in an article in this issue, good

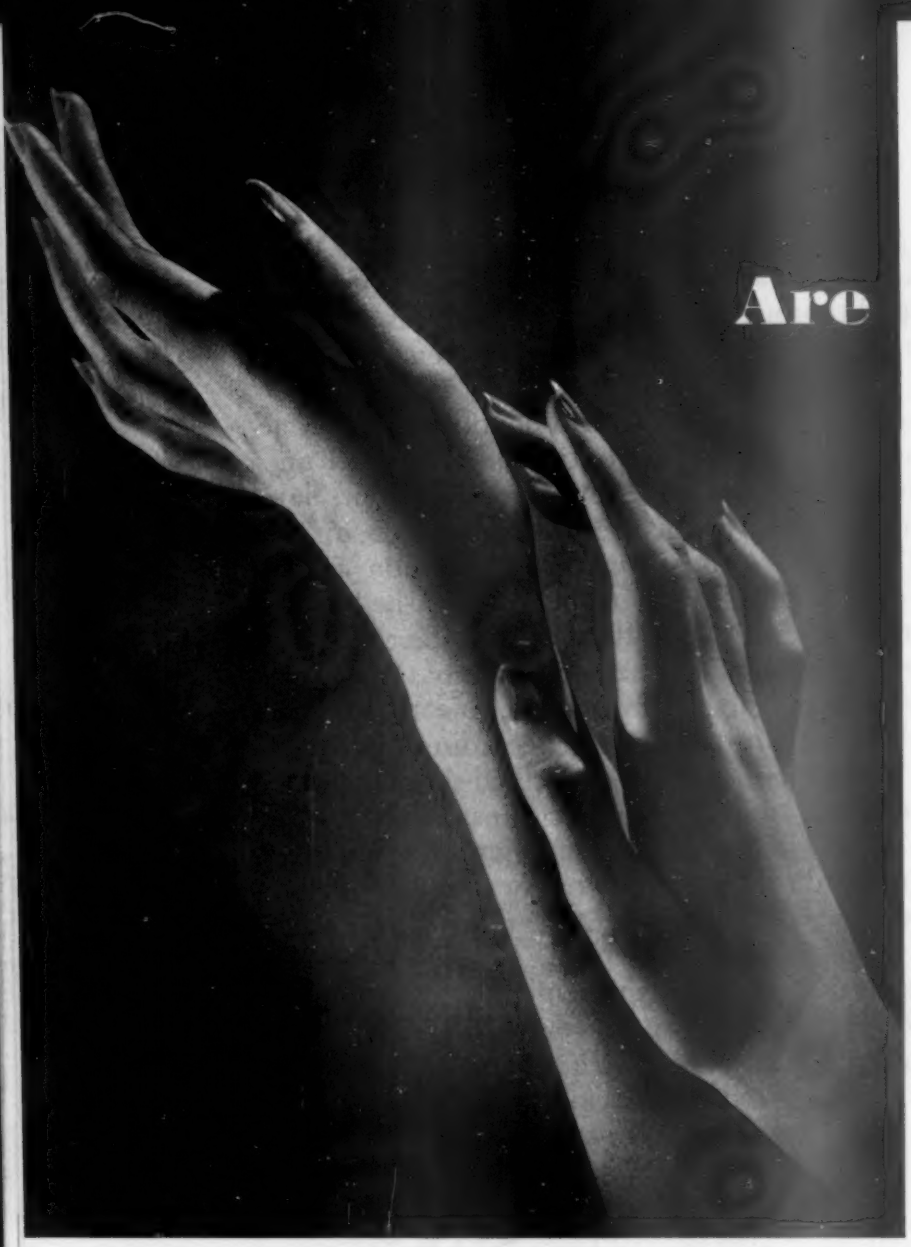
charting pre-supposes accuracy and thoroughness. When we make good charts a habit, the basic qualities of accuracy and thoroughness are attributed to us as a matter of course. In other words, we are taken at our face value.

The average nurse realizes, no doubt, how often accurate diagnosis and efficient treatment depend on a proper record of the patient's condition. She appreciates the statistical value of such records to both doctor and hospital. And she's cognizant of her function as "the third eye of the physician," through which he watches the patient while not actually at his bedside.

Unfortunately, clinical charting is one of those everyday jobs that tends to become routine. We may, if we're not careful, fall into the habit of recording "Pulse improved," when we should have specified the actual rate. Or we may only initial our charts instead of signing them. We may slip into the use of inexact terminology; or fail to record *all* the symptoms; or indulge in irrelevant statements; or write illegibly.

None of these faults is typical. But they do exist. Guarding against them is an unremitting responsibility.

Most of us remember the old saying, "By their works ye shall know them." Substitute "charts" for "works," and you have a pretty good reminder for the nurse of today.



Are you

By RAY ALBERT

Do you sometimes feel like sitting on your hands? Well, don't give up. Even constant scrubbing and strong antiseptics don't need to spoil them. Ray Albert, nationally known specialist in hand-photography, gives the highlights of good hand care.

proud of your hands?

• A nurse who posed for me the other day said rather wistfully,

"I came right down here from surgery. So don't look at my hands. Do you think you can touch them up in the picture?"

She was right. Her hands certainly weren't attractive. But I assured her I'd "shoot" so that they wouldn't show.

"You depend entirely on your weekly manicure, don't you?" I chided in my best fatherly fashion. "Well, that's not enough. Nurses' hands get a lot of attention from patients. I know. I've often been a patient myself. So why not give your hands the same daily care you give your hair and face? It will be a lot more effective in the long run than a single overhauling weekly."

Here's what photographic models suggest:

1. Thorough drying after washing.
2. Lubrication to protect the skin.
3. Careful grooming.
4. Exercise to develop muscle and nerve control.

When you scrub up, make sure that you dry your hands thoroughly afterwards. That—probably more than you realize—will do wonders to keep your skin soft and smooth. Use hand lotions whenever possible. And, at least once a day, massage into each hand a generous portion of rich lubricating cream.

At night, wrap a small piece of cotton around the end of an orangewood stick. Dip it in oil. Work it easily around the tip of each nail. Use an emory board to smooth off rough edges. And whether or not you ever use liquid nail polish, buff your nails with powder polish at least twice a week to help eliminate breaking and chipping.

Exercise for muscle-control deserves special mention. Why? Because nothing distracts a patient more than a nurse whose hands flutter awkwardly.

Here's what models do to develop hand grace and finger control:

Describe circles with the fingers and thumbs of each hand, one finger at a time. Rotate them slowly, clockwise, then counter-clockwise. Stretch each hand, first with fingers straight and tight together, next separating the fingers. Spread the first and second fingers from the third and fourth; hold the second and third together and spread the first and fourth. This will become easier as seldom-used muscles develop.

To limber fingers, hold a flower between thumb and each finger. Try to curve the fingers into graceful positions. And as a final relaxing exercise, shake the whole hand vigorously from the wrist, leaving the fingers limp.

If you do these things religiously, you'll find a noticeable improvement in as little time as a week. And after a month, even a bout in surgery won't mean a serious set-back to the appearance of your hands.

Quick facts about

TUBERCULOSIS

• Tuberculosis, the most widespread of all infectious diseases, has attacked the human organism for more than five thousand years. It has been found in skeletons dating from the neolithic period and in Egyptian mummies. Even Hippocrates was familiar with the condition and successfully prescribed rest and warm climate.

Tuberculosis is a disease of city life. It has been more prevalent when men lived in groups or in unhygienic conditions, and less prevalent (as after the fall of the Roman Empire) when agricultural endeavor was widespread.

The causative organism.—The tubercle bacillus is a narrow, aerobic rod, about 3 microns in length. It may be straight or curved, and at times presents a bead-like appearance. It is highly resistant to unfavorable environmental conditions, and can live in milk, cheese, or sputum for months—even years. Only with difficulty, however, can the organism be grown in the laboratory; when it is, it requires special culture mediums. Sunlight and drying are among the few things detrimental to its existence.

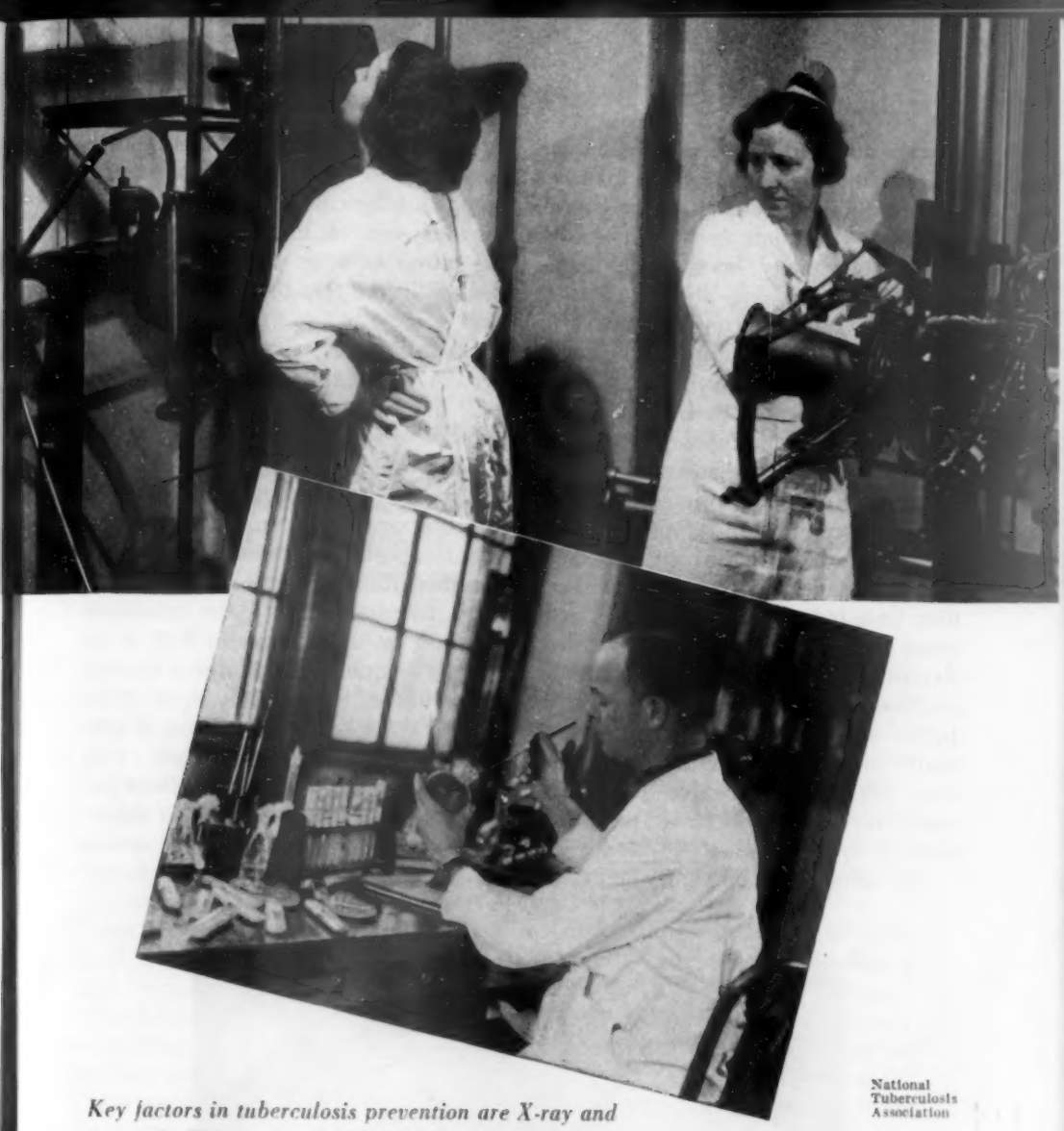
A waxy capsule constitutes about 40 per cent of the mass of the tubercle bacillus organism. This capsule gives the bacillus many of its characteristics, both staining and immunologic.

The tubercle bacillus is acid-fast. After it has been stained with an aniline dye, exposure to alcohol or to strong acid fails to produce discolorization. This characteristic is shared by only a few other micro-organisms. It is employed to advantage in sputum examinations.

Four types of tubercle bacilli have been described: human, bovine (cattle), avian (birds), and ichthyic (fish). Only the first two are infectious to man, and they may be differentiated by appropriate laboratory tests.

When grown in cultures in the laboratory, the tubercle bacillus elaborates a substance known as tuberculin, which is employed diagnostically in the Mantoux test. If a small quantity is injected intradermally in susceptible individuals, an erythematous wheal appears at the site of inoculation. This positive reaction, denoting that the subject has or has had tuberculosis, is valuable from an epidemiologic viewpoint.

Immunity and resistance.—Un-



National Tuberculosis Association

Key factors in tuberculosis prevention are X-ray and research. This review summarizes the various types of the disease, their characteristics, methods of treatment, and nursing care.

derstanding of tuberculosis rests upon appreciation of the immunologic aspects of the disease. It is said that most of us are infected at one time or another.

The first invasion usually takes place during infancy. Gaining entrance via the pulmonary or the gastrointestinal system, the organism sets up a localized infection in the lung. The lesion goes through a series of characteristic changes: induration, hyperemia, caseation. Then the infection breaks through into the local lymphatic channels and

into the adjacent lymph nodes. Characterized clinically by mild fever, malaise, anorexia, loss of weight, and indisposition, the condition is seldom recognized. Fortunately, spontaneous healing takes place.

Primary infection confers a moderate state of immunity. Through the years, reinfection with relatively small numbers of tubercle bacilli frequently occurs. Thus, immunity may be developed to a point where adequate protection is afforded. The primary lesion is uusally discernible at autopsy, appearing as a grey scar on the pleural surface.

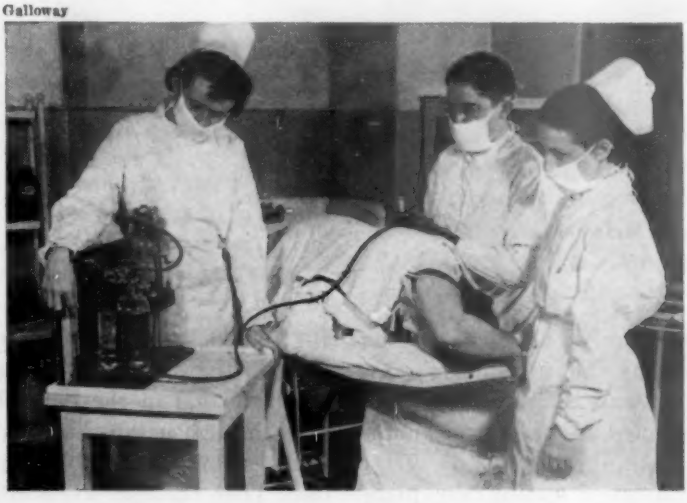
Some decades ago, thousands of Mantoux tests indicated that virtually everyone was once actively tuberculous. Recently, however, the percentage of positive results has fallen appreciably. Better sanitary conditions and public health meaures are making their influence felt. More effective preventive measures, too, have increased public resistance to this disease.

The value of the immunity conferred by the primary infection may be easily demonstrated. African natives fall ready prey to tuberculosis when taken to crowded centers of civilization. The ubiquitous tubercle bacillus finds fertile soil in the organisms of those who have never had the primary infection. In contrast, other races which have lived in crowded quarters for centuries, have developed a degree of hereditary immunity.

Some authorities regard the immunologic changes created by the primary infection as allergic in nature. Subsequent exposure to tubercle bacilli, or to tuberculin, summons an intense allergic reaction. In fact, the cutaneous response to the tuberculin test is an allergic reaction. If too large a quantity of tuberculin is employed, or if the patient is excessively sensitive, a generalized reaction is produced. This leads not only to malaise and fever but also to exacerbation of existing tuberculous processes. At times, irreparable

[*Continued on page* 38]

Galloway



Pneumothorax treatment gives relief to the affected side.

Charts *are* important!

By MARGARET HOPKINS, R.N., as told to MARION GEDDES

Good charts are to nursing what good investments are to banking. If you aren't satisfied with yours, these suggestions will help you.

• "Just look at those 'Remarks': 'Comfortable day.'... 'Slept well.'... 'Comfortable day.' " The doctor ran his finger down the patient's chart.

"Certainly nothing there to indicate a prenephritic abscess," agreed the other physician. "It's worse than cheating at cards—charting like that."

The man whose chart they were studying had just been moved to men's surgical from the medical ward where he had been treated for pleurisy. The chart held no record of the many symptoms he must have had, but which the nurse had failed to observe.

Classroom lectures on charting—how to do it and why to do it—are part of every student's nursing course. Yet after several years of actual nursing, the care of the patient seems so very important that charting may become a matter of routine. You remember *how*, but the reasons *why* slip into the background a little.

A few brush-up suggestions may, therefore, help take some of the tedium out of the task. Here are the doctor's reasons why charts are important.

1. They are the only record the physician has of the patient during the many hours between visits.

2. Errors in treatment may be prevented because a written report is always more accurate than a verbal one.

3. If any question arises, the chart is evidence that the nurse has carried out instructions.

4. Charts contribute largely to scientific case studies, as well as to clinical records.

Clinical charts are more than written reports of daily progress. They are the foundation of good nursing service. They tie together the orders of the doctor with the work of the nurse.

For that reason, a chart should reveal the complete picture of each stage of the illness. It should contain not only the routine temperature and pulse readings, but also a record of every symptom which may aid the doctor in prescribing correct treatment.

Details! That's what the doctor wants. So if you have an opportunity to select your own charts, select one that gives ample space for as many details

as it may be necessary to record. And be sure it is legible enough to be read at a glance.

Exact amounts should always be recorded—of drugs given, or nourishment taken—plus the correct time for every item entered. The time is important, for if a hypodermic is given at ten o'clock, it may be of considerable significance to the doctor to know that the desired reaction did not take place for half an hour.

In an effort to select the *important* details—those that will mean something to the doctor—observation automatically becomes more acute. It won't be necessary to ask the patient how he slept, for instance. His breathing, restlessness, and other indications will tell the trained observer far more than the patient can tell. And, if he wakes every hour, that too should be recorded on the chart—not just the conventional, "Rested comfortably." Lines in his face and the expression around his eyes may indicate that he is in pain. But it may take carefully directed questions to find out the exact location, and just what kind of a pain it is. These details often give the physician the clue he needs.

Incidentally the chances of accuracy are tremendously increased if the charting is kept up to date throughout the day instead of being left till night.

The danger of relaxing the accuracy of the chart was illustrated in the case of a little girl with mastoid. The nurse who was called on the case was competent and took excellent care of the child. For the critical period of the illness, she was very thorough in her charting. Then the child began to recover and charting seemed less necessary. It became the routine "Slept well" and "Comfortable day."

Suddenly the youngster's temperature went up and her pulse became rapid. This was recorded in routine fashion, together with other superficial symptoms. The doctor had no way of knowing that the evidence given on the chart was not an accurate picture of the child's condition. His first diagnosis was double mastoid. Before he could spot the actual condition, pneumonia had a fine start. What the nurse had neglected either to notice or to record were the harsh breathing and other specific symptoms that indicated the real trouble.

Insistence upon accuracy makes nursing more interesting. It develops observation to the point where each patient is more than just "another case." The course of the disease can be followed in the minutest detail, and it is less difficult to recognize important symptoms. The nurse becomes an important factor in tying together manifestations of the disease and the doctor's treatment.

Although charting takes time, it is a much more reliable method than a verbal report could possibly be. The small item forgotten in a verbal report may be the one thing the doctor should have known to forestall wrong treatment.

Charts protect the nurse, too. In case there is any question as to what treatment was given, and when, there is the chart for evidence. When the doctor's orders are on the chart, the whole story is there in black and white. The hospital or doctor may need this protection, as well, in case of legal suit.

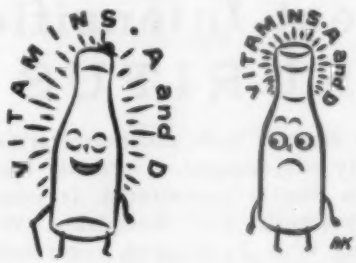
As for charts being a contribution of scientific investigation—that, too, is a worthwhile reason for absolute accuracy. When charting seems tiresome and time-taking, remember that it may be *your* careful records that will be a help in working out an effective treatment for a difficult disease.

Nutrition Briefs

• Taking the cream off the top of the bottle is no longer possible with a new process in the preparation of milk for the consumer. It can't be removed because it just hasn't separated; and won't, no matter how long the milk stands.

The reason why such "homogenized" cream and milk cannot separate is that they are so thoroughly mixed. Forced through a tiny valve at tremendous pressure, the fat globules are shattered, equalizing the cream through the milk.

Although the richness of the milk can no longer be determined by the cream line, there are advantages that seem to compensate. Properly homogenized milk has a soft curd, which means easier digestion, particularly for infants. And, since vitamins A and D are present main-



ly in the cream, homogenization means equal distribution throughout the milk of these valuable factors. Even freezing makes little difference, there being only a slight separation, in contrast to natural milk where remixing is difficult.

In ordering homogenized milk, there is almost positive assurance of careful pasteurization; for without care, this type of milk will sour quickly.

If you really must have top milk for your coffee, however, the report states that homogenized milk at least *looks* like thin cream.—*Jeans: Homogenized Milk. Hygeia, June 1939.*

• Orange juice, grated carrot salad, and similar raw food items have become part of America's daily diet since it was found that they are a good source of healthy

teeth. Now comes a report that even drinking water may have something to do with how many cavities the dentist will find.

The report is based on a study made in four Illinois cities: two where the water contained 1.7 to 2.5 parts fluorides per million, the other two where the water contained only 0.2 parts fluorides per million.

In order to have well-balanced groups for study, only children 12, 13, and 14 years of age were included. All had been constant residents in their respective cities since birth. Other factors averaged approximately the same—such as diet and sunlight intensity.

Where the fluoride content was high, 35 per cent of the youngsters showed no evidence whatever of dental caries. But in the second group—with low fluoride content—the dental caries rate was more than double that of the first.

Towns with sufficient fluorides in the water may, therefore, have a new civic selling point—to the distinct disadvantage of the dentist.—*Dean, Jay, Arnold, McClure, and Elvane: Domestic Water and Dental Caries. U.S. Pub. Health Reports, May 26, 1939.*

*[Fluorides are salts similar to those used for goiter and rheumatism.]

In search of a job

[*Continued from page* 13]

"Why not try the civil service examinations?" I asked. "It can't do any harm and might do some good. I heard the other day that there are some good jobs to be filled." So Amy hotfooted it around and got the information on the coming examinations. One of the best positions listed was that of supervisor in a venereal disease program. But, in order to qualify, the candidate had to show a two-year record of clinical experience in the field. So that was out.

Another of the best was for social workers. Amy knew she could qualify for that, but, as she said: "Why study so many years to do nursing and then be a social worker?"

Finally she found an opening that interested her and for which she felt she was qualified. The United States Public Health Service wanted a supervisor, with experience in a State nursing service. Amy sent a penny postcard requesting information, and a few days later the postman staggered in with several pounds of forms to be filled out. Someone in Washington must have spent long, long years thinking up the questions that had to be answered. Even Baby Snooks couldn't ask so many or such impertinent ones. Together, we spent a whole week-end filling them out. About the only thing omitted was the menu for day-before-yesterday's breakfast.

And the result? Nothing. Just stark, staring nothing. The Government ignored us with enthusiasm.

"If worse comes to worst," said Amy a week later, "I can always go back to my old job. It's still waiting for me. But

I wish I could have a crack at *this* one first."

"This one" involved a municipal examination for a post as teacher of public health in the city school system. There was a good salary which would automatically increase. About 150 nurses turned up to compete for the job.

"For three hours I poured forth my very best knowledge," Amy reported, "until my hand seemed welded to my pen. And they said that that was only the start! If we pass this, there are orals, physicals, and demonstrations to be lived through. But I'm not really worried about anything except the physicals."

Amy is one of those slim people who often look too frail for robust nursing jobs, although I've never known her to be ill and *have* known her to slap down a 200-pound patient who became obstreperous.

The day she took her physical exam, I opened the door cautiously when I got home. Perhaps poor Amy, after passing the other tests with flying colors . . . But a radiant young cyclone flew at me, lifted me off my feet and whirled me around.

"Roxy, I've got it!" she crowed. "I'll get the official notice later, but they told me confidentially this afternoon. Oh, the things we can do and see and have, on that lovely salary! And just when I was beginning to wonder if all that hard work had been worth while!"

All I could think of was what one of our Dutch neighbors used to say: "It yust goes to show that sometimes vat you get is vat you least expect the most."

Rail roads

[*Continued from page* 16]

ing cereus in the club car after dark.

Miss Thompson says you can always tell the loneliest travelers: They sit up later than anyone else on the train. It's almost as if they were instinctively rejecting the solitary state of sleep. I usually try to talk with such passengers as much as possible; often I urge them to go to bed and get a good night's rest."

Insomniac travelers, however, cause the most anxiety at night. Miss Thompson tells of one hectic night with an aged wisp of a woman who persisted in wandering up and down the Pullman car long after midnight. Clad only in a voluminous old-fashioned nightgown, she stalked from one end of the aisle to the other, slowly but deliberately. No amount of amusement or annoyance among the other passengers seemed to have any effect. Only after an hour or two of earnest persuasion on the part of the stewardess did she agree to retire to

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Each ounce of 5 Minute Cream of Wheat provides 12 mg. Fe which prevents nutritional anemia of the infant if an average amount is fed daily.

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New 5 Minute Cream of Wheat contains 143 mg. Ca and 168 mg. P per ounce, and is thus a rich source of these essential minerals for infants and children.

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her berth so that the rest of the car could get some sleep.

An occasional inebriate and (very rarely) a would-be suicide may also provide uneasy moments for the stewardess-nurse. As public relations representative *extraordinaire* for the railways, the stewardess must handle every possible situation with tact and precision. It's to the credit of her nursing training that ill-will at the end of a trip has never yet lost a customer for the railroads.

Of course, not all the work of stewardess-nurses reveals such active excitement. Many of their duties, handled with quiet dispatch, bring them close to the more subtle dramas of every day living.

Florette Welp, chief stewardess on the Union Pacific lines, tells of a blind man traveling East from the Pacific Coast to Morristown, New Jersey. There he was to begin his course of training in the use of a Seeing Eye dog. Aboard the train he asked the stewardess if she would walk up and down station platforms with him at each stop so that he might get his exercise. The stewardess readily agreed.

As the nurse hurried along to keep step with her blind patient he explained that he had already learned to set a steady pace of four miles an hour—the speed at which all Seeing Eye dogs are taught to travel. He told her, too, how much he looked forward to his visit in Morristown, to meeting the animal which would enable him to walk with eyes again.

B & O Stewardess Mildred Traband says she best enjoys caring for children on her route. She never tires of their questions and will spend hours conjuring up games to occupy them during transit. When parents travel with small infants, it is not unusual for the nurse to prepare as many as 100 bottles of formula on one New York to St. Louis run! "That in itself is an adventure," she says. "Imagine the responsibility of keeping all those formulas straight, delivering them on time, and seeing to the comfort of the 200 other passengers on the train as well. It keeps me stepping!"

All stewardess-nurses "keep stepping." For, although they officially go off duty at 10:30 P.M., they must frequently stay on call much later if there is any work to be done. During the daytime, they walk over eleven miles to make thirty or forty round trips through the train. In this process, they open and close car doors perhaps 1500 times—a job in itself. But the work seems to agree with them. The Chicago, Rock Island & Pacific Railway reports with pride that ten of their original Rocket stewardesses began to add weight dur-

ing the first sixty days of their employment. All had to be re-uniformed—at the expense of the railroad!

There is no book of rules for the nurse-stewardess and but few fixed instructions. Her dealings are with individuals. She has been chosen for her job out of hundreds of applicants because she can understand the needs of a tremendous variety of people . . . because she can adapt herself readily to the unpredictable. It's this latter element which makes all stewardess-nurses agree that railroading *is* one direct route to adventure.

Anesthesia

[*Continued from page* 17]

entifically and economically.

Many graduate nurses have been reluctant to select anesthesia as a career because of a once-popular fallacy: that the practice of anesthesia should belong exclusively to the medical profession. That there is little truth in this conception has been demonstrated by several factors:

First, nursing school standards have shown consistent improvement. Graduate nurses today are carefully educated, particularly in the basic sciences. They have demonstrated their ability to grasp and apply the principles of anesthesia despite tremendous advances in technique.

Second, nurses are giving excellent service. A nurse is trained to watch for the small details that presage a change in the patient's condition. She is schooled to do the little things that make for a patient's comfort. Hence, in this respect, the nurse anesthetist is every bit the equal of her M.D. competitor. No one knows as well as the nurse the truth of the axiom that anes-

thesia begins when the patient enters the door of the hospital.

The third factor is the economic situation. Few hospitals can afford to pay the five or ten thousand dollars a year which the medical specialist in anesthesia feels he deserves. To replace nurse anesthetists with M.D.'s in all the nation's hospitals would threaten the financial solvency of many institutions or—more likely—force an increase in hospital rates.

In spite of the belief of some nurses to the contrary, the value of the nurse anesthetist *is* recognized by the American Medical Association. In its revisions of the "Essentials of a Registered Hospital" (passed by the House of Delegates at the 1939 session), the A.M.A. recommended that departments of anesthesia be placed under the supervision of qualified nurse anesthetists "if competent medical personnel is not available." Since competent medical personnel—specialists in anesthesiology—is not available in the majority of hospitals, this amounts to sanction of the present situation. Thus it seems that the place of the nurse anesthetist is well assured for years to come.

Meanwhile, there are many excellent job opportunities. Over 170 new hospitals opened their doors last year, and many more are being built. Practically all these institutions will employ nurse anesthetists. Mushrooming hospitalization plans, too, are sending an increasing number of patients to hospitals for care. Result: increased employment for anesthetists.

Anticipating this expanding need for the nurse anesthetist, leaders in the field met in Cleveland in 1931 and founded the National Association of Nurse Anesthetists. The organization has grown rapidly. Starting from scratch

eight years ago, it now has over two thousand members in twenty-three component State organizations. Within a short time, active membership in every State is expected.

The N.A.N.A. has its headquarters in Chicago with the American Hospital Association. Miss Anna Willenborg, one of the pioneer nurse anesthetists, is executive secretary and director of the association's activities.

The objectives of the N.A.N.A. are aimed at bettering the lot of the nurse anesthetist. In many hospitals now, unfortunately, anesthetists are required to work a full day and then be on call for the remainder of the 24 hours. Pay, too, is often not commensurate with the training necessary and the responsibility involved.

While there has been a recent trend toward better salaries and more satisfactory hours, there are still abuses which can be corrected only through the organized action of anesthetists themselves. In this respect the national association is supplying a competent and aggressive leadership. By raising training standards and eliminating the unfit, the N.A.N.A. believes that pay levels will rise and hours of work will be adjusted on a more suitable basis.

To the graduate nurse seeking a field for specialization, anesthesia commends itself. The postgraduate work required is no longer and no more arduous than that necessary for adequate preparation in any other nursing specialty.

Schools for anesthetists are located in practically every part of the country. Requirements for admission are usually four years of high school, graduation from an accredited nursing school, and State registration. The N.A.N.A. recommends that applicants be within 24 and 35 years of age, although individual cases may warrant exceptions.

Tuition varies widely. Some excellent institutions provide free instruction and full maintenance during the training period. Others charge as much as $250 and supply only partial or even no maintenance.

The length of the course in the better schools is usually six months, although some provide a year. There are some so-called schools of anesthesia which offer terms of two months, or even less. The N.A.N.A. recommends that the latter be avoided by the nurse contemplating anesthesia as a career. It advises six months to a year of instruction in a hospital which has an active surgical practice.

Minimum standards of training, says the N.A.N.A., should include 95 hours of class-room instruction, 18 hours of operating-room instruction, and at least 325 actual administrations of anesthet-

Alka-Seltzer Taken After Alcohol Ingestion Hastens Emptying Time of Stomach

CROSS-SECTION TABULATION
OF EXPERIMENTAL RESULTS

SUBJECT	AFTER ALKA-SELTZER — EMPTYING TIME OF STOMACH	AFTER ASPIRIN — EMPTYING TIME OF STOMACH	RATIO = EMPTYING TIME ASPIRIN / EMPTYING TIME ALKA-SELTZER
	MINUTES	MINUTES	
E. P.	60	90	1.50
F. S.	45	120	2.66
A. G.	60	150	2.50
J. F.	30	135	4.50
T. C.	120	135	1.12
AVERAGES	63.0	125.0	2.45

Comparative Speed of Gastric Evacuation of Alka-Seltzer and Acetylsalicylic Acid Taken Subsequent to Alcohol

IN seeking to evaluate the scope of Alka-Seltzer as an agent for the relief of certain minor ailments, a logical sequence of laboratory and clinical studies has been conducted.

A brief summary of one phase of these experiments is given herewith.

Full details of this and other informative studies are being compiled in the form of an illustrated brochure which will be sent to interested physicians on request.

CONCLUSIONS

After Alka-Seltzer the average time for complete evacuation of the stomach was 63 minutes.

After an equivalent dose of acetylsalicylic acid in the form of aspirin, the average time for complete evacuation was more than 125 minutes.

Therefore, the average time required for complete emptying of the stomach after aspirin was approximately twice the average time required for gastric emptying after Alka-Seltzer.

MILES LABORATORIES, INC.
OFFICES AND LABORATORIES: ELKHART, INDIANA

ics under supervision, before the student is graduated.

The pay the graduate can command when she has finished her course varies with the type and location of the institution offering employment. In general, a fair range is from $100 to $150 per month plus maintenance. Large-city hospitals usually pay somewhat more. The N.A.N.A. hopes that with a raise in standards this figure will increase appreciably within the next decade.

While the graduate of a school of anesthesia can expect no guarantee of a job with her diploma, it is certain that the field is less crowded than many of the other nursing specialties. Employment agencies report a consistently steady demand for well-trained nurse anesthetists.

[*The N.A.N.A. is now preparing a list of schools giving anesthesia courses. Nurses wishing information may address Miss Anna Willenborg, executive secretary, National Assn. of Nurse Anesthetists,* 18 *E. Division St., Chicago, Ill.*]

Tuberculosis

[*Continued from page* 24]

damage may be produced.

Why does tuberculosis strike some and not others?

The factors which govern individual resistance apparently determine susceptibility to clinical tuberculosis. Exposure to cold, the weakness and lethargy of contagious diseases, carcinoma, malnutrition, crowding, starvation, inhalation of dust, and certain types of heart disease lower systemic resistance and lead to increased susceptibility. Such factors may cause a well walled-off primary infection to become active and to produce infection from within.

It is also established that long and

repeated exposure to the tubercle bacillus leads to tuberculosis, even in the absence of predisposing factors. Thus, children of tuberculous parents almost invariably become infected.

Controversy has raged for some time regarding the portal of entry of the tubercle bacillus. Three routes are known to exist: the pulmonary, the gastrointestinal, and the cutaneous. The last named is fairly rare. Considerable evidence, however, may be advanced for the pulmonary and gastrointestinal routes.

It is probably safe to assume that the infection of children takes place primarily via the stomach or the tonsils. This assertion is supported by the fact that since legal enforcement of milk pasteurization, tuberculosis in children has decreased. In cases of mesenteric and bone-and-joint tuberculosis, infection is due to the bovine type of organism which is ingested with milk. Pulmonary tuberculosis, on the other hand, seems to be due to inhalation. The human type bacilli are responsible for practically all pulmonary infections.

Pulmonary tuberculosis.—The origin of any given case of pulmonary tuberculosis is always doubtful. The condition may be due to reinfection from without with a large number of tubercle bacilli. Or, it may result from a breaking down of a calcified tuberculous lymph node.

For an unknown reason, the process usually begins in the apical portion of one lung. Early lesions are small. But, as the tubercle bacilli multiply, extension to neighboring lymph nodes takes place. One of several courses may be followed:

If the process is detected clinically and treatment instituted, the progress

of the infection may be halted. Healing by fibrosis and calcification of involved lung tissue and lymph nodes may follow. In exceedingly susceptible subjects, the extent of the infection increases, producing more destruction of the lung tissue. Extension to other lobes of the same lung or to the opposite lung takes place.

If the tuberculous process erodes a pulmonary arteriole, the caseous, bacteria-laden tissue enters the blood stream and becomes disseminated throughout the lungs. If a pulmonary vein is perforated, the infection circulates throughout the body. This form of spread produces miliary tuberculosis, a usually fatal form of the disease.

At times, the infection burrows through a bronchus and, as a result of coughing, the infected material is driven downward into normal portions of the lung. This tissue, "allergic" to the tubercle bacillus and its toxin, reacts intensely, producing the well-known galloping consumption.

The symptoms of pulmonary tuberculosis are familiar and may be divided into general and local manifestations.

Because he has lost weight, the tuberculous patient appears malnourished. The complexion is delicate and pasty. The fingers frequently appear long and tapering, the eyes sunken. Temperature may reach a peak of 101° or 102° F. in midafternoon. Dyspnea, weakness, lethargy, anorexia, and easy fatigability complete the picture.

Cough is a prominent feature. Sputum is raised, and is either swallowed or expectorated. In active cases, the sputum teems with tubercle bacilli. The sputum may be clear, or may be yellow, containing caseous particles. An offensive odor indicates secondary infection of the pulmonary tissue.

Hemoptysis, or pulmonary hemorrhage, results from erosion of a blood vessel into a bronchus. The amount of blood loss depends roughly upon the size of the vessel opened. While usually more alarming than fatal, hemoptysis may lead to loss of life by exsanguination.

The diagnosis of pulmonary tuberculosis is established with certainty only when tubercle bacilli are found in the sputum. Many are visible if the lesions are extensive, but detection of only one organism is incriminating. Physical diagnostic measures and X-rays readily establish clinical diagnosis.

Tuberculosis of other organs.—Tuberculous bacteremia occurs when a tuberculous focus erodes a blood vessel and tubercle bacilli enter the blood stream. Dissemination to distant organs follows. It is believed that this

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process is fairly frequent and that the organism is able to overcome and destroy the implanted bacteria. However, insemination does occur. Blood-borne infection may attack and destroy (through progressive caseation and tissue liquefaction) any organ in the body. At times, as in tuberculosis of the kidneys, the secondary infection assumes greater importance than the original focus. With development of secondary foci, local symptoms referable to the new infection are superimposed upon the systemic manifestations.

Treatment and nursing care.—In the treatment of any infectious condition, prophylactic measures are of utmost significance.

In Europe, BCG is employed with apparent success in establishing a state of active immunity in susceptible children and adults. BCG is a vaccine containing living tubercle bacilli which have been attenuated in their virulence by elaborate cultural methods. Fed to subjects with negative skin reactions, it apparently provokes a state of immunity which has lowered the incidence of tuberculosis in the subjects studied. More time is needed before definite conclusions can be drawn.

Control of bovine tuberculosis, pasteurization of milk, registration and isolation of tuberculous patients, and removal of children from tuberculous parents have caused the death rate of tuberculosis to drop steadily in this country. It seems safe to believe, therefore, that tuberculosis in the United States can eventually be eradicated.

Treatment, whether in the sanatorium or the home, aims to increase the patient's resistance by means of rest, fresh air, good and abundant food, and restricted and graded exercise. The final outcome depends upon the re-

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* Personal "air-conditioning" as herein used applies to the removal of stale perspiration body odors which occasionally permeate an office or room.

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sponsiveness of the patient, rather than upon the influence of specific medication.

Besides routine nursing care, the nurse must teach the patient rigid rules of hygiene and cleanliness. It is her job to help him understand his illness and its mode of transmission. She must explain the need of covering the mouth when coughing, the necessity for proper sputum disposal, and the importance of the principles of medical asepsis. By maintaining the patient's morale, she can help him bear his long stay in bed during the febrile stage. And, she can thus gain his cooperation in eating and in control of emotional excitement.

The diet consists of nourishing foods, with an abundance of fresh milk and eggs. Cod liver oil or other sources of Vitamin D are helpful.

The patient should be encouraged to lie on the affected side. This position minimizes motion in the diseased lung. Although direct sunlight is to be avoided, the bed should be moved outdoors or onto a screened porch for several hours during the day.

In hemorrhage, opiates are given to produce relaxation. So that the cough reflex may not be suppressed, however, opiates should not be administered in large doses during severe hemoptysis.

In recent years, surgical measures have been employed with increasing success in the treatment of tuberculosis. By means of thoracoplasty, pneumothorax, and phrenicotomy, the affected side is put at rest and the rate of healing is substantially accelerated.

[*Send a stamped, addressed envelope for a bibliography of the procedures discussed in this article.*—THE EDITORS]

Interesting products

What is your "I.Q." on new products and services? Here is a ready check-list to keep you up-to-date. You may have samples or literature by writing the manufacturers whose products are described on this page. Be sure to give your registration number, however. The service is available only to registered nurses.

ITCHING: Patients suffering skin discomforts—particularly itching and chafing—will welcome any help you can give them during the warm weather. CALMITOL is said to give immediate and prolonged relief from such torments because of its mild anesthetic action. Control of pruritis will improve the patient's mental comfort, too. A trial tube will be sent on request. Thomas Leeming & Co., Dept. RN 8-39, 101 West 31st St., New York, N.Y.

FOOT POWDER: In a recent survey of a representative group of nurses, 91 per cent were found to have fungus infection of the feet. In line with a general prevalence of athlete's foot, QUINSANA powder has been developed as an aid in prevention and treatment. It absorbs the moisture so favorable to the fungus, as well as acting on the germ. Shaken into shoes, it may also help prevent reinfection. The makers offer a large tin free to nurses. Write Mennen Co., Dept. RN 8-39, Newark, N.J.

EYE-WASH: Medical and beauty authorities agree that summer climate and outdoor activities are hard on the eyes. Now is the time, they say, when daily eye-washing is imperative. MURINE is a collyrium reported to be effective for this purpose. It is frequently recommended for simple conjunctivitis and is bland enough to be used safely as often as every fifteen minutes. For your sample bottle, send to the Murine Co., Dept. RN 8-39, 121 Varick St., New York, N.Y.

SHOE CLEANER: If you've been wishing for a white shoe cleaner to carry with you, you'll be interested in DOO-DABS. They are little cloth pads, impregnated with whitening, and need only to be dampened and rubbed on the shoe. Cardboard applicators to which they are attached will protect your manicure. Although small enough to tuck into your purse, each tab will clean a pair of shoes. A sample for cleaning your duty shoes will be sent by the B. F. Allen Co., Dept. RN 8-39, 660 N. Wabash Ave., Chicago, Ill.

ENZYME: Doctor's orders for "plenty of milk" are often difficult to carry out. For a great many patients have retained a dislike for milk since childhood. One solution that seldom fails is to dress milk up and offer it made into desserts such as JUNKET. In making Junket, sweetened and flavored rennet powder or plain rennet tablets, sweetened and flavored to taste, are added to lukewarm milk. Rennet-custard desserts contain the rennet enzyme which causes milk to digest more readily. Samples and diet lists on request. Write "The 'Junket' Folks," Chr. Hansen's Laboratory, Inc., Dept. RN 8-39, Little Falls, N.Y.

RECIPES: There are hundreds of ways to prepare canned foods—yet most of us turn them out of the can and serve them "as is." Specialist in canning, the AMERICAN CAN COMPANY tells us, in two new booklets, how unimaginative this attitude is. One booklet takes up canned fruits; the other, vegetables. Both are filled with ideas that make you long for a kitchenette, some canned foods, a can-opener, and the time to wield it! For your copies, address American Can Co., Dept. RN 8-39, 230 Park Ave., New York, N.Y.

Consult your physician about the cause. Meanwhile, two Anacin tablets with water, repeated in two hours if necessary, provide gratifying relief for pain due to headache.

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There is no charge to registered nurses for the use of this department. To apply for a "position available," simply outline your qualifications in a letter. Address the letter to the correct box number care of R.N.—A JOURNAL FOR NURSES, *Rutherford, N. J. (Send no money with your application. If the bureau requires a registration fee, it will bill you separately.) Submit "positions wanted" early. They will be published in the order received.*

POSITIONS AVAILABLE

***ANESTHETIST:** California. Catholic hospital, 100 beds. Lakeside training preferred. Maintenance and $125. Box W46.

***ANESTHETIST:** California. County institution, 500 beds. Must be eligible membership National Association Nurse Anesthetists. Anesthesia and clinic work. Salary $105, maintenance. Box W47.

***ANESTHETIST:** South. General hospital, 200 beds. Salary $90 and maintenance. (Placement bureau charges $2 registration fee.) Box C813.

***ASSISTANT OPERATING ROOM SUPERVISOR:** Midwest. For 150-bed hospital. Maintenance and $80 $100. (Placement bureau charges $2 registration fee.) Box C814.

***EDUCATIONAL DIRECTOR:** East. Degree, some experience in public health and clinical teaching necessary for 200-bed hospital. (Placement bureau charges $2 registration fee.) Box C815.

***GENERAL DUTY:** California. Small county hospital near Coast. Eight-hour duty; $85, full maintenance. Box W48.

***GENERAL DUTY:** California. Private 250-bed hospital, in pleasant resort city. Maintenance and $75. Eight-hour duty. Box W49.

***GENERAL DUTY:** California. Two nurses. Small Catholic hospital, beautifully located in Redwood district. Meals and $85. Eight-hour duty. Box W50.

GENERAL DUTY: Minnesota. Four positions. Psychiatric. Salary depends on preparation of applicant. Full maintenance. Minnesota residents only. Located in progressive medical center. Eight-hour day. Give full details in first letter. Box RSH-89.

***HEAD NURSE:** East. For operating room, 230-bed hospital. Must be capable of teaching operating room technique. (Placement bureau charges $2 registration fee.) Box C818.

***INSTRUCTOR:** California. Science degree required for position in large Catholic hospital near San Francisco. Maintenance and $125. (Placement bureau charges $2 registration fee.) Box W51.

***INSTRUCTOR.** East. Nursing Arts instructor for 210-bed hospital. B.S. degree required. (Placement bureau charges $2 registration fee.) Box C819.

***INSTRUCTOR:** Ward, for 135-bed general hospital. Some experience and college work desired, not necessarily a degree. (Placement bureau charges $2 registration fee.) Box C820.

***NIGHT SUPERVISOR:** New England. For 66-bed maternity unit in 230-bed hospital. Salary open. (Placement bureau charges $2 registration fee.) Box C822.

***NURSE-X-RAY TECHNICIAN:** Illinois. Must be capable of administering skin X-ray treatments. Physician's office. (Placement bureau charges $2 registration fee.) Box C824.

***OBSTETRICS:** California. General duty in private maternity hospital near Los Angeles. Chicago Lying-In training preferred. Meals and $85. Box W53.

***OBSTETRICS:** Central California. Night duty, ten hours, in 20-bed, air-conditioned hospital. Salary $90 and meals. Box W54.

***OBSTETRICAL SUPERVISOR:** East. College preparation and experience desired for 500-bed hospital. (Placement bureau charges $2 registration fee.) Box C825.

***OPERATING ROOM SUPERVISOR:** Southwest. For general hospital, 100 beds. Maintenance and $100. (Placement bureau charges $2 registration fee.) Box C826.

***PEDIATRIC SUPERVISOR:** Midwest. Postgraduate work required. Medium-sized hospital. (Placement bureau charges $2 registration fee.) Box C827.

***SCIENCE INSTRUCTOR:** California. B.S. degree required for position in 290-bed hospital. (Placement bureau charges $2 registration fee.) Box C828.

***SUPERINTENDENT OF NURSES:** South. For 100-bed general hospital. Salary $150 and maintenance which includes a private apartment outside of the Nurses' home. (Placement bureau charges $2 registration fee.) Box C830.

[*Turn the page*]

**Asterisk indicates position listed by a placement bureau.*

***SUPERVISORS:** California. Several nurses of supervising caliber for large hospital now building new unit. General duty with excellent opportunity for promotion. Some college background advantageous. Starting salary, $115; meals. Straight eight-hour duty. Box W55.

***SUPERVISOR:** California. Surgical ward of 26-bed unit approved hospital. At least eight units nursing education required. Full maintenance and $110. Box W56.

***SURGERY:** California. Surgery supervisor. Complete charge operating room in 100-bed private hospital. Maintenance and $135. Box W57.

***SURGERY:** Southern California. Industrial hospital needs good surgical nurse. Salary $75, maintenance. Box W58.

***TECHNICIAN:** California. X-ray and laboratory technician for 100-bed hospital. Salary $100, maintenance. Box W52.

POSITIONS WANTED

ANESTHETIST: Postgraduate work in anesthesia and surgery. Prefers Colorado or California, but will consider other States. Texas registration. Box 89-1.

GENERAL DUTY: Or supervisor. Postgraduate work in obstetrics. Experienced as operating room supervisor, night supervisor, and industrial nurse. Pennsylvania registration. Age 31. Would prefer vicinity of Rochester, N.Y. Box 89-2.

GENERAL DUTY: General surgical nursing or ward supervision. Five years experience in tuberculosis work. Registered in Kentucky, Tennessee, and Montana. Age 36. Box 89-3.

INDUSTRIAL NURSE: Thirteen years experience. Registered in New Jersey, New York, and Connecticut. Age 34. Single. Box 89-4.

INSTRUCTOR: Theoretical or practical. Or supervisory work in hospital with training school. College graduate. Excellent training. Box 89-5.

MALE NURSE: Interested in industrial first aid and surgery. Desires permanent position in Illinois or Southern States. Age 25. Salary open. Box 89-6.

MATRON: In nurses' home. Wide nursing experience. Middle-aged. Prefers to locate in Philadelphia or vicinity. Box 89-6.

OFFICE NURSE: Desires position with Cleveland physician. Ohio registration. Age 22. Box 89-7.

OFFICE NURSE: Experienced. Graduate laboratory-technician. Pennsylvania and Tennessee registration. Willing to locate anywhere in Pennsylvania; prefers Pittsburg or vicinity. Box 89-8.

OFFICE NURSE: Diversified experience. Excellent typist. Knowledge simple laboratory work. Box 89-9.

OBSTETRICAL SUPERVISOR: Postgraduate work in obstetrics; 15 years experience. Illinois registration. Will locate anywhere. Box 89-10.

OPERATING ROOM SUPERVISOR: Day or night duty. Los Angeles or suburbs only. Ten years diversified experience. Registered in Georgia, Michigan, and New York. Box 89-11.

PSYCHIATRIC NURSE: Desires position in psychiatric and neurological hospital in New York State. Ward and private duty experience. New York registration. Age 30. Salary open. Box 89-12.

PUBLIC HEALTH NURSE: Generalized program, school nursing, or industrial. Experienced in outpatient service, social service; also State health work. Box 89-13.

SCHOOL NURSE: In private school for girls. Or companion-nurse, or housemother. Middle-aged. California and Illinois registration. Excellent references. Box 89-14.

SCRUB NURSE: Or assistant to doctor. Excellent experience. Catholic. Age 25. Minimum salary $100. Box 89-15.

SURGICAL NURSE: Also knowledge of laboratory work. Would consider office work. Five years experience in office of general practitioner. Age 27. Prefer West. Salary $90-100. Box 89-16.

TECHNICIAN: Training in laboratory work, B.M.R. and electrocardiography. Also some X-ray. Postgraduate in bacteriology and biology. No preference as to locality. Box 89-17.

TECHNICIAN: Physical therapy. Desires position with institution or in doctor's office. Prefers New England. Member American Physiotherapy Association and American Registry of Physical Therapy Technicians. Box 89-18.

**Asterisk indicates position listed by a placement bureau.*

PRESENT VITAMIN STANDARDS AND UNITS

● Early in this decade the first International Standards of Reference and Units for vitamins defined in terms of definite quantities of the standard materials were tentatively adopted by the Permanent Commission on Biological Standardization of the League of Nations. At subsequent meetings this Commission has replaced certain of the original standard materials by the pure vitamins or preparations considered to be better adapted as standards of reference. However, the new units defined in terms of the new standards represent approximately the same biological activities as the original International Units.

Believing that the present units and the standards of reference upon which they are based will be of interest, they have been tabulated and defined:

Vitamin A

The standard of reference (1) is a solution of purified beta-carotene in an inert oil, of such concentration that one gram of solution contains 300 micrograms (0.300 mg.) of beta-carotene. The International Unit of vitamin A is the vitamin A activity of 2 mg. of the standard solution, or 0.6 micrograms of beta-carotene.

Vitamin B_1

The reference standard (2) is the International Standard preparation of thiamin chloride. The International Unit for vitamin B_1 is the antineuritic activity of three micrograms (3γ) of the International Standard.

Vitamin C

The reference standard (1) for vitamin C is a specified sample of crystalline levo-ascorbic acid. The International Unit for vitamin C is the vitamin C activity of 0.05 mg. of this standard.

Vitamin D

The reference standard (1) for vitamin D is a solution of irradiated ergosterol, prepared under specified conditions at the National Institute for Medical Research (London). The International Unit for vitamin D is the vitamin D activity of 1.0 mg. of this standard solution.

The International System of expressing vitamin values will undoubtedly soon become official for all authoritative agencies which concern themselves with the establishment of vitamin standards and units. Reference standards for riboflavin and nicotinic acid—both of which are of significance in human nutrition—have not been defined. However, the use of units such as micrograms or milligrams of the crystalline compounds to express riboflavin and nicotinic acid values is becoming increasingly prevalent.

The use of vitamin units of definite value permits correlation of various phases of vitamin research, particularly those phases relating to the vitamin contents of common foods and to the quantitative human requirement for these essential food factors. Although vitamin supplementation of the diet may be desirable under certain circumstances, it is apparent (3) that a well planned mixed diet is most suitable for supplying optimal quantities of the vitamins along with the other essential nutrients. The established vitamin values of canned foods (4) serve as an indication of their usefulness in formulating such diets.

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(1) 1935. Nutrition Abstracts and Reviews, 4, 705.
(2) 1938. League of Nations Bulletin of the Health Organization, 7, 882.
(3) 1938. J. Am. Diet. Assn., 14, 1.
1938. J. Am. Diet. Assn., 14, 8
(4) 1935. J. Home Econ., 27, 658.
1935. J. Nutrition, 9, 667.
1938. J. Am. Med. Assn., 110, 650.
1938. Nutrition Abstracts and Reviews, 8, 281.

What phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles. Address a post card to the American Can Company, New York, N. Y. This is the fiftieth in a series which summarize, for your convenience, the conclusions about canned foods reached by authorities in nutritional research.

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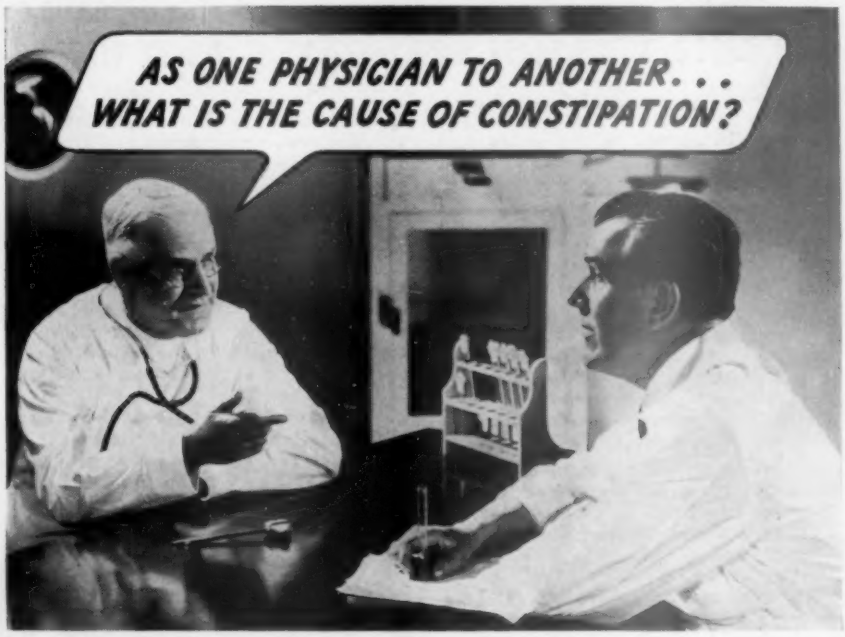

OBVIOUSLY, there is no single cause. Each case must be judged on its own merits. Anatomical differences, variations in diet and habit and specific pathological entities all enter into the cause. However, it is safe to say that faulty habit plays a role in the great majority of cases, and that loss of neuro-muscular tone is a very common secondary factor.

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